

IN THE CLAIMS

H1  
3. An isolated nucleotide segment of no more than 3000 nucleotides containing a fragment of at least 25 contiguous nucleotides from the coding region as set forth in SEQ ID NO:1.

H2  
12. A kit for determining an alteration in a mammalian MSH5 gene by DNA amplification comprising:

a set of DNA oligonucleotides primers in a vial, said set allowing synthesis of a DNA ending the DNA mismatch repair gene, wherein said primers are selected from the group consisting of SEQ ID NOS:3-50.

H3  
41. An isolated and purified nucleotide segment, wherein said nucleotide segment is a fragment of at least 25 contiguous nucleotides of SEQ ID NO: 1, and wherein said nucleotide segment is mRNA or cDNA.